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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/625,348	07/25/2000	Hirokazu Kondo	Q58053	7552
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Sughrue Mion Zinn MacPeak & Seas PLLC 2100 Pennsylvania Avenue NW Washington, DC 20037-3213			EXAMINER BURLESON, MICHAEL L	
			ART UNIT	PAPER NUMBER
			2626	
			DATE MAILED: 04/08/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/625,348

Applicant(s)

KONDO, HIROKAZU

Examiner

Michael Burleson

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 1, 6-9 and 14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

3. Regarding claims 1, 6, 8, 9 and 14, "at least portions of said color data D, D' " and "remainders of said color data D, D' ". Page 10, lines 23-27 of the specification shows, what appears to be a portion of the color data D', but it is not specified.

4. Regarding claim 7, "gradually shifting the halftone dot area percentages of the junction ranges". Page 15, lines 1-8 of the specification speaks of interpolation in order to make a gradual shift from the relationship in which the printing image data CMYK are

Art Unit: 2626

equalized respectively to the proof image data C'M'Y'K' to the relationship of the color conversion table LUT already set for the color equalization ranges with respect to the junction ranges. There is no mention of halftone dot area percentages.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4 and 9-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Shimazaki US 6396595.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in

the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Regarding claim 1 as best understood by the claim language, Shimazaki teaches of a standard conversion table (38), used for making standard color corrections (column 3, lines 44-46) and a color correcting processor (32) for converting CMYK into C'M'Y'K' (figure 3), which reads on a method of generating a color conversion table for converting color data D to be processed by a first device into color data D' to be processed by a second device. Shimazaki teaches that the standard color conversion table depends on output principles of the color printer, (column 3, lines 44-46), which reads on a constraint condition. He also teaches of a test chart data generator that creates a three dimensional conversion characteristics CMY and one dimensional conversion characteristics K for converting the color image data into their colorimetric values (column 4, lines 64-67 and column 5, lines 1-3), which reads on generating a color conversion table between at least portions of color data D, D' according to constraint conditions and a color conversion table between remainders of color data D, D' in colorimetric association therewith.

Regarding claim 2, Shimazaki teaches of color image data of CMYK into color image data of C'M'Y'K' based on the color conversion data supplied from the combined conversion table (44) (column 6, lines 28-32), which reads on constraint condition comprises a condition for constraining a relationship for converting at least one primary color data.

Regarding claim 3, Shimazaki teaches of color image data of CMYK into color image data of C'M'Y'K' based on the color conversion data supplied from the combined conversion table (44) (column 6, lines 28-32), which reads on constraint condition comprises a condition for constraining a relationship for converting at least one primary color data.

Regarding claim 4, Shimazaki teaches of a test chart data generator (26), in which the test chart data comprises of halftone dot percentages of particular ranges, which are stored in standard color conversion table (38) (column 4, lines 32-67 and column 5, lines 1-67). This reads on a condition for saving halftone dot area percentages of particular ranges in at least portions of color data D, D'.

Regarding claim 9 as best understood by the claim language, Shimazaki teaches of a combining processor (42) (column 3, lines 38-67), which reads on an apparatus for generating a color conversion table for converting color data D to be processed by a first device into color data D' to be processed by a second device. Shimazaki teaches of an editing apparatus (column 3, lines 9-16), which reads on a constraint condition setting means for setting a constraint condition. He also teaches of a test chart data generator (26) (column 4, lines 32-67 and column 5, lines 1-67), which reads on color conversion table generating means for generating a color conversion table between at least portions of color data D, D' according to constraint conditions and generating a color conversion table between remainders of color data D, D' in colorimetric association therewith.

Regarding claim 10, Shimazaki teaches that the control/display unit (22) of the editing apparatus (12) allows the operator to select a function based on printing conditions and separating conditions (column 3, lines 58-65), which reads on the constraint condition setting means comprising of constraint condition storage means for storing constraint conditions and constraint condition selecting means for selecting the desirable constraint condition from constraint condition storage means.

Regarding claim 11, Shimazaki teaches that the colorimetric values are stored in the standard color conversion table (38) (column 5, lines 34-67), which reads on color conversion table storage means for storing a color conversion table in colorimetric association between all color data D, D'. He also teaches of a test chart data generator (26) that generates test chart data for the test charts using K plate function of the K plate function data. (column 4, lines 32-35) The operator selects the K plate function using the control/display unit (22) (column 3, lines 57-63), which reads on color conversion table generating means comprising means for modifying color conversion table into a new color conversion table based on constraint condition.

Regarding claim 12, Shimazaki teaches of a test chart T1 that is measured for the colorimetric values of CMYK (column 4, lines 57-67 and column 5, lines 1-3) and test chart T2, that is based on the colorimetric values of C'M'Y'K' (column 5, lines 4-15), which reads on a first profile storage unit for storing a first profile representing a conversion relationship between color data D and colorimetric data and a second profile storage unit for storing a second profile representing a conversion relationship between colorimetric data and color data D'.

Regarding claim 13, Shimazaki teaches that CMYK is based on printing conditions (column 3, lines 64-67 and column 4, lines 1-5), which reads on a profile established depending on printing conditions of a printing machine. He also teaches that the test chart data C'M'Y'K' is supplied to the output unit (34) generating the test chart T2 (column 5, lines 16-25), which reads on a second profile comprises a profile established depending on output conditions of a printer.

Regarding claim 14 as best understood by the claim language, Shimazaki teaches of a color correcting processor (32) that converts the supplied color image data of CMYK into C'M'Y'K'. The color data C'M'Y'K' is then outputted as a color proof image (column 6, lines 28-33), which reads on an apparatus for generating a proof by converting image data composed of color data D to be processed by a first device into image data composed of color data D' to be processed by a second device, using a color conversion table and generating a proof of an image produced by the first device with the second device. Shimazaki also teaches of a printing condition correction conversion table (36), standard color conversion table (38) and calibration conversion table (40) being generated (column 6, lines 13-17), which reads on constraint condition setting means for setting a constraint condition. Shimazaki teaches of a combined conversion table (44) that contains color conversion data selected from printing condition correction conversion table (36), standard color conversion table (38) and calibration conversion table (40) (column 6, lines 34-38), which reads on a color conversion table generating means for generation a color conversion table between at least portions of color data D, D' according to constraint conditions. He also teaches of

a test chart data generator (26) generates a test chart T2 (column 5, lines 4-6), which reads on generating a color conversion table between remainders of color data D, D' in colorimetric association therewith. Shimazaki teaches of a color correcting processor (32) that converts the supplied color image data of CMYK into C'M'Y'K' based on the color conversion data supplied from the combined conversion table (44) (column 6, lines 27-33), which reads on color converting means for converting color data D into color data D' using color conversion table generated by color conversion table generating means. He also teaches of an output unit (34) that outputs a color proof image (column 6, lines 30-33), which reads on a proof output means for outputting proof based on color data D'.

Regarding claim 15, Shimazaki teaches of a printing condition correction conversion table (36), standard color conversion table (38) and calibration conversion table (40) (column 6, lines 13-17), which reads on constraint condition storage means for storing constraint conditions. He also teaches of combined conversion table (44) that contains color conversion data selected from printing condition correction conversion table (36), standard color conversion table (38) and calibration conversion table (40) (column 6, lines 34-38), which reads on constraint condition selecting means for selecting the constraint condition from constraint condition storage means.

Regarding claim 16, Shimazaki teaches that the colorimetric values are stored in the standard color conversion table (38) (column 5, lines 34-67), which reads on color conversion table storage means for storing a color conversion table in colorimetric association between all color data D, D'. He also teaches of a test chart data generator

(26) that generates test chart data for the test charts using K plate function of the K plate function data. (column 4, lines 32-35) The operator selects the K plate function using the control/display unit (22) (column 3, lines 57-63), which reads on color conversion table generating means comprising means for modifying color conversion table into a new color conversion table based on constraint condition.

Regarding claim 17, Shimazaki teaches of a color printer (18) in which a color proof is generated (column 6, lines 13-15 and figure 3), which reads on proof output means comprises a printer.

Claim Rejections - 35 USC § 103

3. Claim 5 is rejected under 35 U.S.C. 103(a) as being obvious over Shimazaki US 6396595 in view of Sawano et al US 6411318.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and

reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(I)(1) and § 706.02(I)(2).

1. Regarding claim 5, Shimazaki teaches of a test chart data generator (26), in which the test chart data comprises of halftone dot percentages of particular ranges, which are stored in standard color conversion table (38) (column 4, lines 32-67 and column 5, lines 1-67). This reads on a condition for saving halftone dot area percentages of particular ranges in at least portions of color data D, D'. Shimazaki fails to teach the particular range is established in a highlight area and/ or a shadow area of color data D, D'. Sawano et al. teaches that the illustrated intervals are employed for the highlight (column 8, lines 24-26), which reads on particular range is established in a highlight area and/ or a shadow area of color data D, D'. Shimazaki could have been modified with the illustrated intervals in the highlight area of Sawano et al. This modification would have been obvious to one of ordinary skill in the art at the time of the invention to include all areas of the color data images to correct discrepancies.

4. Claim 8, is rejected under 35 U.S.C. 103(a) as being obvious over Shimazaki US 6396595 in view of Laumeyer et al US 5572632.

The applied reference has a common assignee with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(I)(1) and § 706.02(I)(2).

2. Regarding claim 8, as best understood by the claim language, Shimazaki teaches of a standard conversion table (38), used for making standard color corrections (column 3, lines 44-46) and a color correcting processor (32) for converting CMYK into C'M'Y'K' (figure 3), which reads on a method of generating a color conversion table for converting color data D to be processed by a first device into color data D' to be processed by a second device. Shimazaki teaches that the standard color conversion

table depends on output principles of the color printer, (column 3, lines 44-46), which reads on a constraint condition. He also teaches of a test chart data generator that creates a three dimensional conversion characteristics CMY and one dimensional conversion characteristics K for converting the color image data into their colorimetric values (column 4, lines 64-67 and column 5, lines 1-3), which reads on generating a color conversion table between at least portions of color data D, D' according to constraint conditions and a color conversion table between remainders of color data D, D' in colorimetric association therewith. Shimazaki fails to teach of a condition for saving dot gains of at least portions of color data D, D'. Laumeyer et al. teaches that CMYK dot gains is stored in a printer frame buffer (column 12, lines 63-67 and column 13, lines 1-9), which reads on a condition for saving dot gains of at least portions of color data D, D'. Storing dot gains as taught by Laumeyer et al could have modified Shimazaki. This modification would have been obvious to one of ordinary skill in the art at the time of the invention so the dot gains saved can be used in the output image.

Allowable Subject Matter

3. Claims 6 and 7 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Art Unit: 2626

4. Regarding claim 6, prior art used fails to teach of a condition for equalizing the halftone dot area percentages of particular ranges in at least portions of color data D, D', and a condition for gradually shifting halftone dot area percentages of junction ranges between particular ranges and other ranges from the halftone dot area percentage of color data D to the halftone dot area percentage of color data D'.
5. Regarding claim 7, prior art fails to teach of junction ranges comprising a condition for interpolating the halftone dot area percentages of particular ranges and the halftone dot area percentages of the junction ranges.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Burleson at (703) 305-8733. The examiner can normally be reached Monday thru Friday, 8:00 a.m. – 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached on (703) 305-4863. The fax phone

Art Unit: 2626

numbers for the organization where this application or proceeding is assigned are
(7013) 872-9306 for regular communications and after final communications.

Any inquiry of a general nature or relation to the status of this application or
proceeding should be directed to the receptionist whose telephone number is (703) 305-
3900.

MIb

Mr3

March 30, 2004

KAW Williams
KIMBERLY WILLIAMS
SUPERVISORY PATENT EXAMINER